DETAILED ACTION

1. This office action replaces the one mailed 3-19-2009. The previous office action was incorrect and simply a re-mailing of an earlier office action that applicant had responded to. The examiner apologizes for this mistake.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Obradovich et al., 6148261, in view of Fry et al., 5160807.

3. Obradovich et al. disclose a GPS module that produces locations information associates with the position of the module and handheld computing device in line 12, col.2; an L-band transceiver that broadcasts the location information to a satellite relay and receives location information from the at least one portable communications device via the satellite relay on line 16, on col. 7, and on lines 48, on col. 11 through line 14, on col. 12, the disclosure of satellite communications would include L-band frequencies; a processing unit that provides messages to the L-band transceiver and updates a display associated with the tablet computer assembly according to the received location information and the location information produced at the GPS module in figure 4, on lines 13-23, on col. 7and item 21, and an internal power supply is inherent. Obradovich et el. do not disclose an electrically conductive enclosure around the L-band transceiver

(Faraday cage) to reduce EM interference and the Faraday cage being configured as a heat sink to draw away heat away and the module is easy to remove from the handheld computing device. Fry et al. teach Faraday cage around electronics to reduce EM interference and the Faraday cage being configured as a heat sink to draw away heat away in the figures and on lines 26-54, on column 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shielding of Fry et al. in the invention of Obradovich et al. because such modification would the electromagnetic interference that can occur with a large number of electronic circuits are placed in close proximity to each other. Shielding and heat issues are well known to anyone of ordinary skill in the art and the configuration claimed in the current invention is safely within the ordinary creativity of one of ordinary skill in the art. Obradovich and Fry et al. do not disclose that the module is easy to remove from the handheld computing device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to separate the module from the handheld or Obradovich, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art (Nerwin v. Erlichman, 168 USPQ 177, 179).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Obradovich et al., 6148261, in view of Fry et al., 5160807 as applied to claim 1 above, and further in view of Gilbert et al., US2003/0032426.

5. Obradovich et al. and Fry et al. disclose the limitations as set forth above. They do not disclose a single antenna to facilitate the transmission and reception of the messages by the L-band transmitter and the GPS module. Gilbert et al. teaches using

one antenna for both the GPS and L-band transceiver in paragraph 53. It would have been obvious to one of ordinary skill in the art to use one antenna instead of two because is would reduce costs. The trade off would just be that data transmissions would be restricted some.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Obradovich et al., 6148261, in view of Fry et al., 5160807, and further in view of Gilbert et al., US2003/0032426 as applied to claim 2 above, and further in view of Saunders et al., US2005/0162334.

7. Obradovich et al., Fry et al., and Gilbert disclose the limitations as set forth above. They do not disclose using a quadrifilar helix antenna (QHA). Saunders et al. teach using a QHA in paragraph 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a QHA because they can be small and compact, and are relatively insensitive to the effects of handling as disclosed in paragraph 2 of Saunders.

8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obradovich et al., 6148261, in view of Fry et al., 5160807, as applied to claim 1 above, and further in view of Bielby, "Xilinx".

9. Obradovich et al. and Fry et al. disclose the limitations as set forth above. They do not disclose an I/O board that translates communication between the L-band transceiver and the handheld computing device and the internal power supply (which is inherent in Obradovich) being connected to the communications module. Bielby teaches the I/O board used is the ISA or PCI bus of the computer. An ISA and PCI bus

include power. It would have been obvious to one of ordinary skill in the art to use the ISA or PCI bus along with their associated control boards because such modification would be cheaper and eliminate the need to an case and external power supply as discloses by Bielby on page 5.

10. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Obradovich et al., 6148261, in view of Fry et al., 5160807, as applied to claim 1 above, and further in view of Lada et al., 2005/0114553.

11. Obradovich et al. and Fry et al. disclose the limitations as set forth above. They do not disclose a battery that is attachable to the internal power source or battery of the handheld computing device. Lada et al. teaches a battery that is attachable to the internal power source or battery of the handheld in paragraphs 40-41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the battery of Lada et al. in the invention of Obradovich et al. and Fry et al. because such modification would extend the life of the first battery as stated in Lada et al.

Response to Arguments

Applicant's arguments with respect to claims 1 through 6 have been considered but are moot in view of the new ground(s) of rejection. It doesn't appear that the declarations filed on 7-17-08 would overcome the references already cited in the prior art rejections. The issue would be with exhibit one not showing the RF and heat shield fully encompassing (or substantially encompassing) the transceiver. This is the only exhibit with a date that is clearly before the earliest priority date of Lionetta et al. However, to make this issue moot and to move prosecution forward a different

reference has been applied with a priority date that will not present the problems of Lionetta et al.

Conclusion

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian J. Broadhead/
Examiner, Art Unit 3664